

Title (en)

Control of a power semiconductor switch

Title (de)

Steuerung eines Leistungshalbleiterschalters

Title (fr)

Contrôle d'un interrupteur électrique à semi-conducteur

Publication

**EP 1988632 B1 20100512 (EN)**

Application

**EP 08075321 A 20080429**

Priority

FI 20070337 A 20070430

Abstract (en)

[origin: EP1988632A1] Method and arrangement for controlling the gate control voltage (U<sub>2C</sub>) of voltage-controlled power semiconductor components (V<sub>2</sub>), such as IGBT transistors, used in power electronics appliances in a fault situation, such as in a situation of short-circuit of the output connectors of a frequency converter, in which method the gate control voltage (U<sub>2C</sub>) of the power semiconductor component (V<sub>2</sub>) is decreased before the connection of the negative gate control voltage intended to extinguish the power semiconductor switch in order to minimize the voltage peak of the voltage over especially the power semiconductor component, such as the collector voltage, and in which the gate control voltage (U<sub>2C</sub>) is decreased before the connection of the negative gate control voltage intended to extinguish the power semiconductor switch such that, its level decreases constantly, and it remains positive, and in which the gate control voltage (U<sub>2C</sub>) is decreased thus until at least the first voltage peak over the component, especially the collector-emitter voltage peak, has passed.

IPC 8 full level

**H03K 17/082** (2006.01)

CPC (source: EP FI US)

**H02M 1/08** (2013.01 - EP US); **H03K 17/04123** (2013.01 - EP US); **H03K 17/08122** (2013.01 - EP US); **H03K 17/08126** (2013.01 - FI); **H03K 17/08128** (2013.01 - EP US); **H03K 17/18** (2013.01 - EP US); **H03K 17/567** (2013.01 - EP US); **H03K 2217/0027** (2013.01 - EP US)

Cited by

GB2532215A; US11962291B2; CN106471740A; JP2020096525A; WO2021176003A1; WO2016005501A1; US9825625B2; US10680604B2; US11469756B2

Designated contracting state (EPC)

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